ABSTRACT

A real time translator (101) having a voice receiver or microphone (101), a voice to text converter (102), a text-to-text spoken language translator (103) for receiving a first language and translating to a second selected language, a text to speech converter (105) for converting the translated second selected language to a voice output and a voice emitter or speaker (211) for emitting the voice output. A second voice receiver or microphone (201), a voice to text converter (202), a text-to-text spoken language translator (203) for receiving a second language and translating to the first selected language, a text to speech converter (105) for converting the translated first selected language to a voice output and a voice emitter or speaker (111) for emitting the voice output. There is parallel processing of the voice to text conversion and/or text translation and/or the text to voice conversion. Two sound cards (151, 152), or two channels (151A, 151B) operating separately on a sound card (151), interface with the first and second voice receivers (101, 201) and first and second voice emitters (111,211) The parallel processing can be by central processing unit (cpu) parallel processing techniques or by software controlled switching techniques.